

Notice of Allowability

Application No.

09/405,787

Examiner

John Pezzlo

Applicant(s)

KAO ET AL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.


1. ☒ This communication is responsive to amendment filed 23 January 2006.
2. ☒ The allowed claim(s) is/are 1-4, 6-10, 12-15, 17-21, 23-35, 37-41, 43-69 (renumbered 1-63 respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JOHN PEZZLO
PRIMARY EXAMINER

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Henry, on Tuesday, 7 February 2006.

The claims have been amended as follows:

1. Claim 12, line 3, deleted "capable of".
2. Claim 23, line 7, deleted "capable of".
3. Claim 52, line 3, deleted "capable of".

Allowable Subject Matter

Claims 1-4, 6-10, 12-15, 17-21, 23-35, 37-41, and 43-69 are allowable over the prior art of record.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: Applicants have claimed uniquely distinct features in the instant invention, which are not found in the prior art, either singularly or in combination. Each independent claim identifies the following uniquely distinct features;

1. Regarding claim 1 – A carrier class switch apparatus comprising: means for receiving voice calls having TDM voice/fax, VoIP, VoATM and VoFR media types, said means for receiving a voice call having a first media type and a first signaling type corresponding to said first media type, means for converting voice calls to TDM voice/fax, VoIP, VoATM and VoFR media types, said means for converting said voice call to a second media type different than said first media type, means for determining said second media type in accordance with instantaneous availability of bandwidth resources, means for relaying signaling associated with said voice call of said first signaling type to a second signaling type corresponding to said second media type, and means for forwarding said voice call having said second media type.
2. Regarding claim 12 – A method of providing differential voice over the network services in a carrier class switch apparatus comprising: receiving a voice call having a first media type with a broadband interface receiving TDM voice/fax, VoIP, VoATM and VoFR media types, said voice call having a first signaling type corresponding to said first media type, converting said voice call to a second media type different than said first media type, said second media type being any one of TDM voice/fax, VoIP, VoATM and VoFR media types, determining said second media type in accordance with instantaneous availability of bandwidth resources, relaying signaling associated with said voice call of said first signaling type to a second signaling

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type corresponding to said second media type, and forwarding said voice call having said second media type.

3. Regarding claim 23 – A carrier class switch apparatus integrated in a single switching platform comprising: a switching fabric adapted to switch packets between a plurality of broadband switching ports, a broadband interface coupled to one of said plurality of broadband switching ports, said broadband interface being adapted to communicate voice calls between said switching fabric and a broadband connection said broadband interface with said broadband connection communicating TDM voice/fax, VoIP, VoATM and VoFR media types, a local switch module coupled to another one of said plurality of broadband switching ports, a narrowband interface coupled to said local switch module, said narrowband interface being adapted to communicate voice calls between said switching fabric and a narrowband connection, said narrowband interface capable of communicating TDM voice/fax, VoIP, VoATM and VoFR media types, a switch control card coupled to said broadband interface and said narrowband interface, said switch control card being adapted to relay signaling associated with a voice call between said broadband connection and said narrowband connection, said voice call having a first signaling type corresponding to a first media type at said broadband connection and a second signaling type corresponding to a second media type different than said first media type at said narrowband connection, and a call server coupled to said switch control card to determine said second media type in accordance with a service plan profile of a calling party associated with said voice call.

4. Regarding claim 32 – A computer readable medium having a sequence of instructions, the sequences of instructions, when executed by a processor, causing the processor to perform a

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method of providing differential voice over the network services in a carrier class switch apparatus, the method comprising: receiving a voice call having a first media type being any one of TDM voice/fax, VoIP, VoATM and VoFR, and a first signaling type corresponding to said first media type, converting said voice call to a second media type different than said first media type, said second media type being any one of TDM voice/fax, VoIP, VoATM and VoFR media types, determining said second media type in accordance with instantaneous availability of bandwidth resources, relaying signaling associated with said voice call of said first signaling type to a second signaling type corresponding to said second media type, and forwarding said voice call having said second media type.

5. Regarding claim 43 – A carrier class switch apparatus comprising: means for receiving voice calls having TDM voice/fax, VoIP, VoATM and VoFR media types, said means for receiving a voice call having a first media type and a first signaling type corresponding to said first media type, means for converting voice call to TDM voice/fax, VoIP, VoATM and VoFR media types, said means for converting said voice call to a second media type different than said first media type, means for determining said second media type in accordance with a service plan profile specific to a calling party associated with said voice call, means for relaying signaling associated with said voice call of said first signaling type to a second signaling type corresponding to said second media type, and means for forwarding said voice call having said second media type.

6. Regarding claim 52 – A method of providing differential voice over the network services in a carrier class switch apparatus comprising: receiving a voice call having a first media type with a broadband interface receiving TDM voice/fax. VoIP, VoATM and VoFR media types,

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said voice call having a first signaling type corresponding to said first media type, converting said voice call to a second media type different than said first media type, said second media type being any one of TDM voice/fax, VoIP, VoATM and VoFR media types, determining said second media type in accordance with a service plan profile specific to said calling party associated with said voice call, relaying signaling associated with said voice call of said first signaling type to a second signaling type corresponding to said second media type, and forwarding said voice call having said second media type.

7. Regarding claim 61 - A computer readable medium having a sequence of instructions, the sequences of instructions, when executed by a processor, causing the processor to perform a method of providing differential voice over the network services in a carrier class switch apparatus, the method comprising: receiving a voice call having a first media type being any one of TDM voice/fax, VoIP, VoATM and VoFR, and a first signaling type corresponding to said first media type, converting said voice call to a second media type different than said first media type, said second media type being any one of TDM voice/fax, VoIP, VoATM and VoFR media types, determining said second media type in accordance with a service plan profile specific to a calling party associated with said voice call, relaying signaling associated with said voice call of said first signaling type to a second signaling type corresponding to said second media type, and forwarding said voice call having said second media type.

The closest prior art, either singularly or in combination, fail to anticipate or render the above limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 1-4, 6-10, 12-15, 17-21, 23-35, 37-41, and 43-69 being allowable, **Prosecution On The Merits Is Closed** in this application.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Pirot et al. (US 6,856,676 B1) discloses a system and method of controlling and managing voice and data services in a telecommunications network.
2. Lewis (US 2003/0198216 A1) discloses a system and method for bypassing data from egress facilities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(571) 273-8300

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

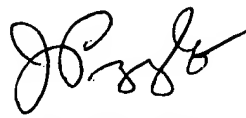
Jefferson Building

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Alexandria, VA.

John Pezzlo

3 February 2006


JOHN PEZZLO
PRIMARY EXAMINER